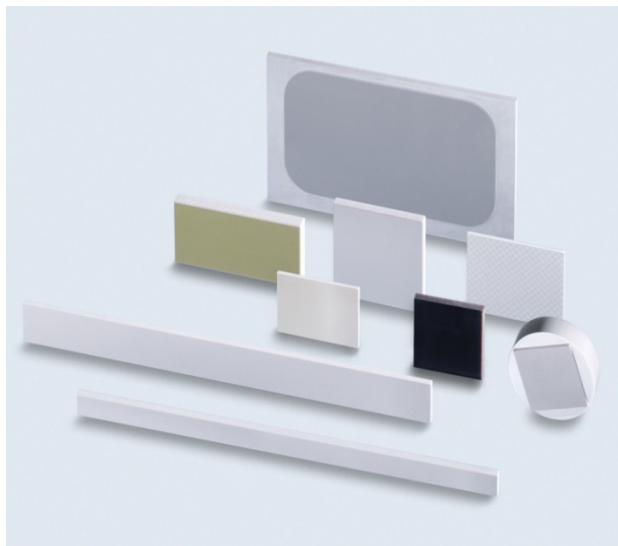


SCHOTT® Fiber Optic Faceplates

Now introducing our glass compositions for high resolution image transfer!

Offering a greater selection of glasses to meet your specific needs. Better value without compromising the quality.



Performance Characteristics

Faceplates are used for high resolution, “zero thickness” image transfer applications that include CCD and CMOS coupling, LCD and OLED displays, image intensification, remote viewing, field flattening and x-ray imaging. In opto-electronic applications, faceplates are used as both input and output image intensifier windows.

All SCHOTT faceplates are fabricated to customer-specific requirements. Typical shapes are round or rectangular, and in a variety of sizes up to 325 mm² formats. Typical element sizes range from as small as 2.5 μm to 25 μm or larger. Faceplates can be manufactured to be vacuum tight.

NEW Glass Compositions for Faceplates

Glass Types*					
Typical Performance Parameters	RFG 85	RFG 88	RFG 92	RFG 92A RH	RFG 95
Fiber size (μm)/Resolution lp/mm**	6/102	6/102 4/128	6/102	6/102	6/102
Numerical Aperture	0.85	0.88	0.92	0.92	0.95
Stray Light Control (EMA)	Yes	Yes	Yes	Yes	Yes
Collimated Transmission @ 550nm (3mm thick)	NA	73	83	76	NA
Coefficient of Thermal Expansion (x10 ⁻⁷ /°C)	NA	63	80	83	NA
Density (g/cm ³)	3.0	3.41	3.69	3.8	3.0
Core/Clad Ratio	70/30 75/25	70/30	75/25 90/10	75/25 90/10	70/30 72/25
Lead Free	Yes	Yes	Yes	Yes	No
Phosphor Compatible	NA	Yes	Yes	Yes	NA
Maximum Square Formats (mm)	325	325	325	325	325



Typical Faceplate Specifications

Glass Type										
Typical Performance Parameters	47A	47A HT	47ARH Radiation hardened	24A	24AS	24C	75A	75C	55A	55C
Fiber size (µm)/Resolution lp/mm**	6/102 4/128	6/83	6/102	25/23 10/64 8/72 6/102	8/72 6/102 4/128 2.5/203	10/64 6/102 4/128	27/23	6/102	60/10	60/10
Numerical Aperture	1.0	1.0	1.0	1.0	1.0	1.0	0.58	0.58	0.28	0.28
Stray Light Control (EMA)	Yes	Yes	Yes	Yes	Yes	No	Yes	No	Yes	No
Collimated Transmission @ 550nm (3 mm)	73	78	68	70	75	86	60	95	59	95
Coefficient of Thermal Expansion (x10 ⁻⁷ /°C)	68	70	68	68	68	68	61	61	78	80
Density (g/cm ³)	4.15	4.5	4.16	4.0	4.0	4.0	3.05	3.05	2.4	2.4
Core/Clad Ratio	75/25	90/10	75/25	70/30	70/30	70/30	60/40	75/25	60/40	75/25
Lead Free	Yes	Yes	Yes	No	No	No	Yes	Yes	Yes	Yes
Phosphor Compatible	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Maximum Square Formats (mm)	325	325	325	325	≤31	325	325	325	325	325



* Other special glass types available upon customer's request

** Resolution Measurement performed with a 1951 USAF Resolution Target using diffuse white light illumination. Resolution may vary with other wavelengths.